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American Petroleum Institute
1220 L Street, Northwest
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# Monthly Statistical Report

Prepared by the Statistics Department

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DECEMBER 1984

## ESTIMATED U.S. PETROLEUM BALANCE

## SUMMARY

**Total Energy**

Estimated total energy consumption rose more than 5% in 1984 over 1983 levels. All major fuel sources experienced an increase.

**TABLE A**
**ENERGY CONSUMPTION BY TYPE**
**(ANNUAL QUADRILLION BTU'S)**

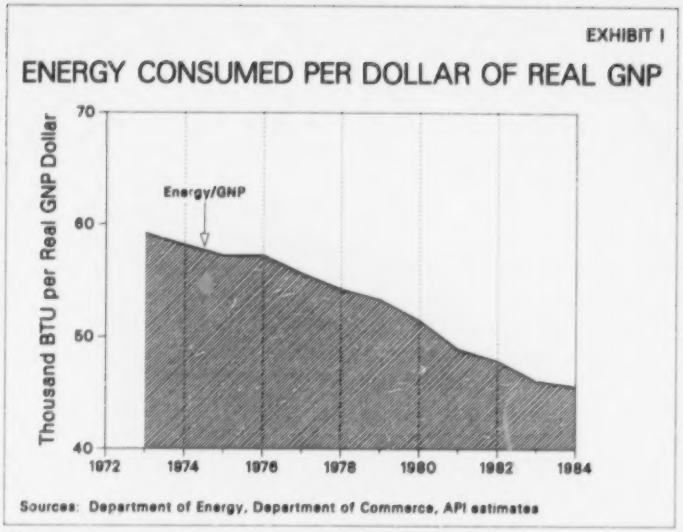
| | Coal | Natural Gas | Petroleum | Other | Total |
|---|---|---|---|---|---|
| 1983 | 15.9 | 17.5 | 30.1 | 7.2 | 70.7 |
| 1984 | 17.2 | 18.5 | 31.2 | 7.7 | 74.6 |
| Change | + 1.3 | + 1.0 | + 1.1 | + 0.5 | + 3.9 |
| Percent Change | + 8.4 | + 5.3 | + 3.8 | + 6.2 | + 5.5 |
| 1983 share (percent) | 22.5 | 24.8 | 42.5 | 10.2 | |
| 1984 share (percent) | 23.1 | 24.7 | 41.9 | 10.3 | |
| Percentage point change in market share | + 0.6 | - 0.1 | - 0.6 | + 0.1 | |
| | Year-to-year percentage change in BTU's by half-year | | | | |
| First half | +14.0 | + 7.5 | + 6.6 | + 6.8 | + 8.4 |
| Second half | + 3.7 | + 2.8 | + 1.2 | + 5.6 | + 2.6 |

Note: Calculations based on unrounded numbers

It is worth noting that, while coal, natural gas, and petroleum consumption showed roughly similar increases on a BTU basis, coal consumption experienced the largest percentage gain. The increase in oil consumption represents the smallest year-to-year percentage change of the three major fuel sources and, as a result, its 1984 share of total energy consumption is estimated to have dropped again from prior-year levels. Natural gas consumption rose about 5% in volume but was essentially unchanged in share of total energy consumption.

The energy/GNP ratio, shown in Exhibit I, showed only a minor change in 1984, falling from 46.1 thousand BTU per constant 1972 dollar to 45.5 thousand. During the 1979-1982 period, intense conservation, coupled with almost-stagnant real GNP levels, resulted in a rapid decline of the energy/GNP ratio; energy use fell about 3.5% annually during that period but GNP stayed essentially unchanged. Energy use lagged economic growth in 1983, staying about the same as during the prior year while GNP rose 3.7%. The year 1984 saw the first increase in energy consumption since 1979 - 5½% - while GNP is estimated to have risen at a somewhat higher 6.7% rate. As a result of the small differential in the rates of increase, the energy/GNP index's decline moderated considerably, falling by only 1% from 1983 levels.

EXHIBIT I



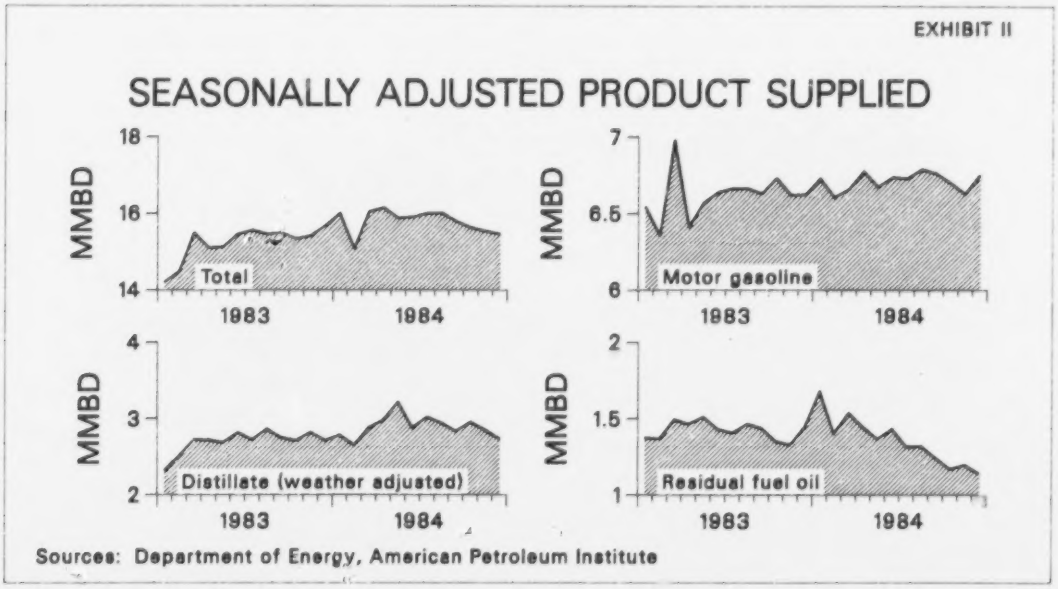

**Petroleum Products**

**ROSE 3.5% IN 1984 OVER 1983 LEVELS.**

With December showing an in part weather-related 665 MBD (4.0%) decline, and a general moderation of year-to-year increases during the second half of the year, domestic petroleum products supplied's annual rise was held to 3.5% in 1984 over the prior-year level. The year-to-year increase is the first since 1978.

Light product deliveries and "other oils" were responsible for the 1984 increase. Residual fuel oil deliveries extended the slide started in the late seventies, as prices overall continued to be firm-to-higher while the costs of competing fuels were relatively stable or trending lower.

EXHIBIT II




While total domestic products supplied rose on a year-to-year basis, changes were not uniform among individual products. Exhibit II details the month-to-month path of major product deliveries on a deseasonalized basis for 1983 and 1984.

Crude production, aided by strength in both the Alaskan and lower 48 sectors, continued to rise. Though, at 1.4%, the year-to-year increase was small, it was three times last year's rate of advance. Imports rose almost 8%, with product import increases contributing about twice as much volume as crude imports. Total inventories were relatively stable on a deseasonalized basis except for a mainly weather-related build-up in February and late-summer/early fall variances caused by volatility in world crude oil markets. Year-end inventories were minimally above those at the end of 1983.

Drilling activity picked up somewhat. The count of active rigs rose 9% over 1983 levels, though recent year-to-year increases have been well below mid-year levels. The number of wells reported drilled rose an estimated 8% (11 months data), but year-to-year changes exhibited a mixed pattern during the course of year. The percentage increase is inflated by an estimated 2 percentage points because of the inclusion of another week in 1984's count in January.

Seismic activity, a longer-range indicator of drilling activity, rose about 4% in 1984.

## PRODUCTS SUPPLIED[1/]

### Gasoline

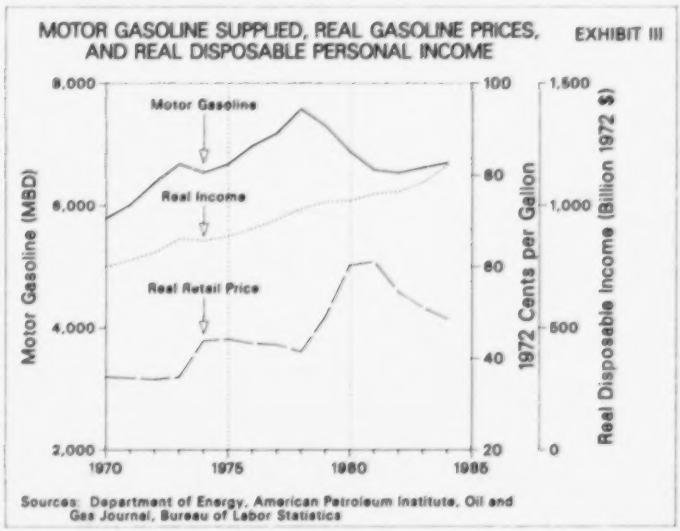
**UP 1% OVER 1983.** Gasoline demand rose 80 MBD (1.2%) in 1984 over the prior-year level, as prices continued to slide and real disposable income rose. December gasoline deliveries are shown as 65 MBD (0.9%) below last year's. There is some question, however, as to whether or not all gasoline component imports blended into finished gasoline are finding their way into finished gasoline totals because of reporting and classification difficulties. As a result, the recent substantial rise in imports of gasoline components may not be fully reflected in total gasoline deliveries shown in the attached tables of estimated U.S. petroleum balances.

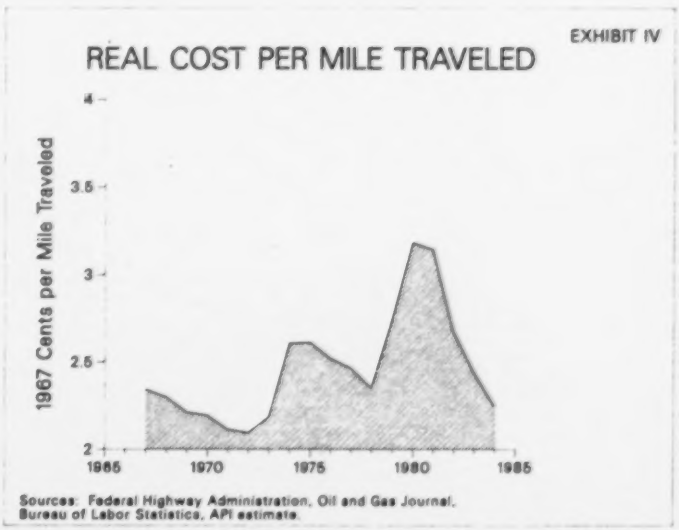
Gasoline pump prices ended the year about 2½¢ below year-end 1983 levels. Rising briefly in the spring, they have deteriorated almost uninterruptedly since then. Current nominal levels are about equal to spring 1980 levels despite a roughly 30% increase in general price levels (CPI basis) and a 5¢ increase in the federal excise tax, effective April 1, 1983, on motor fuels.

Exhibit III traces the path of real gasoline prices, real disposable income, and gasoline demand since 1970. Except for the late seventies, when the impact of rapidly-rising prices overshadowed all other effects, real disposable income and gasoline demand have been closely correlated.

With acceleration in the improvement of engine efficiency in the late seventies and early eighties, gasoline demand levels were clearly affected substantially. Since 1981, for example, the combined effect of real gasoline price declines of some 25% from their peak in March of that year and a rise of almost 13% in real disposable income should have raised gasoline demand by more than 10%. The impact of these factors has, however, been in large measure offset by increases in engine efficiency. The effect of improved fleet engine efficiency on driving costs is reflected in Exhibit IV. After adjustment for inflation, estimated cost per mile traveled in 1984 was almost 30% below 1980/81 levels for the fleet as a whole and roughly equal to 1967 levels.

Unleaded gasoline's share of the gasoline market reached about 63% in December, some five percentage points above last year's level. Year-to-year increases in unleaded's share, in the area of 3% early in the year, have averaged about twice that figure in the past several months. The quickening pace of car sales in 1983 and 1984 helped to change fleet mix and accelerate the need for unleaded gasoline.




### Distillates

**DELIVERIES UP ALMOST 7% FOR THE YEAR.** Distillate deliveries were down an entirely weather-related 305 MBD (9.1%) in December but were 184 MBD (6.8%) higher for the year as a whole. Overall, however, weather's impact on distillate consumption has been small. Despite January 1984's extreme cold and one of the warmest Decembers on record - 16% warmer than normal and 30% warmer than last year—heating degree days for 1984 as a whole were only 1% less than normal and 4% less than last year, the latter reducing the year's distillate increase by perhaps 15-20 MBD. Year-to-year increases were greater in the first half of 1984, in part because early 1983 delivery levels were depressed by market uncertainties. In addition, truck and rail traffic was increasing at a roughly 15% rate in the first half but moderated in the second half of the year (rail shipments, in fact, decreased during most of the fourth quarter). For 1984 as a whole, the on-highway and rail segments are estimated to be responsible for about two-thirds, or roughly 120 MBD, of the total distillates increase from 1983 levels.

The table below shows a sector-by-sector breakdown of estimated distillate deliveries for first and second-half periods of 1983 and 1984, based on currently available economic and financial data:

**TABLE B**
**Estimated Distillate Consumption by Sector (MBD)**

| SECTOR | First Half | | | Second Half | | | Total Year | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | %Change | 1983 | 1984 | %Change | 1983 | 1984 | %Change |
| Resid & Comm. | 750 | 828 | 10.4 | 575 | 540 | - 6.1 | 662 | 683 | 3.2 |
| Industrial | 203 | 236 | 16.3 | 213 | 224 | 5.2 | 208 | 230 | 10.6 |
| Farm | 193 | 200 | 3.6 | 175 | 188 | 7.4 | 184 | 194 | 5.4 |
| Oil Companies | 71 | 77 | 8.5 | 75 | 81 | 8.0 | 73 | 79 | 8.2 |
| Utilities | 27 | 33 | 22.2 | 37 | 23 | -37.8 | 32 | 28 | -12.5 |
| Railroad | 259 | 297 | 14.7 | 285 | 307 | 7.7 | 272 | 302 | 11.0 |
| Bunkers | 93 | 95 | 2.2 | 101 | 93 | - 7.9 | 97 | 94 | - 3.1 |
| On-Highway | 916 | 1060 | 15.7 | 1013 | 1050 | 3.7 | 965 | 1055 | 9.3 |
| Military | 44 | 46 | 4.5 | 44 | 46 | 4.5 | 44 | 46 | 4.5 |
| Off-Highway | 101 | 118 | 16.8 | 131 | 146 | 11.5 | 116 | 132 | 13.8 |
| Subtotal | 2657 | 2990 | 12.5 | 2649 | 2698 | 1.8 | 2653 | 2843 | 7.2 |
| Miscellaneous | 25 | 5 | | 49 | 56 | | 37 | 31 | |
| Total | 2682 | 2995 | 11.7 | 2698 | 2754 | 2.1 | 2690 | 2874 | 6.8 |

Sources: DOE-Totals only - 1983 + 10 Months 1984; Nov/Dec. 1984 Totals-API data. Sectorial breakdowns are API estimates.

**Residual Fuel Oil**

**DOWN ABOUT 4% FROM 1983 LEVELS.**

December's 351 MBD (22.1%) residual fuel oil delivery decrease was the largest of 1984 and only to a minor degree weather related. For the year as a whole, residual fuel oil deliveries fell 63 MBD (4.4%) from the prior-year level.

First-half increases and second-half decreases in bunker fuel deliveries produced a net decline of some 10 MBD below 1983 bunker fuel levels in 1984. Continued conservation efforts, such as slow-steaming, are likely to have more than offset an overall increase in petroleum trade. This market segment represents a significant portion of total worldwide shipping activity.

Electric utilities resorted to greater residual fuel oil use mainly at times of weather extremes, such as occurred during the beginning of the year. For 1984 as a whole, deliveries to utilities are estimated to have fallen some 50 MBD despite a roughly 4% increase in electricity generation, further depressing residual fuel oil's share of input.

Exhibit V shows the price history of major energy sources used by U.S. electric utilities to generate electricity for the period 1979 through 1984. In the utilities sector of the market, where spot transactions have played a lesser role, the margin between residual fuel oil and natural gas narrowed in 1983 but widened somewhat in 1984.

Little year-to-year change occurred in industrial use of residual fuel oil. While stronger in the first half, deliveries over the past several months have again experienced year-to-year decreases as a result of relatively high resid prices and some slackening in the pace of the economic recovery. In contrast to other petroleum products, prices of residual fuel oil have been relatively constant—and at times higher—because coal-strike-related United Kingdom needs, alternate use of residual fuel oil as refinery feed, and changes in refinery configurations to produce proportionately higher yield of lighter products have provided continued support for residual fuel oil price levels. Prices for natural gas, its major competitor in the industrial sector, have likewise been relatively stable, though, where contract renewals occurred, lower price terms reportedly resulted in many instances. As a result, 1984 residual fuel oil deliveries in the industrial sector are believed to have been about equal to 1983 levels, since incentives for switching between residual fuel oil and natural gas did not change materially.

EXHIBIT V

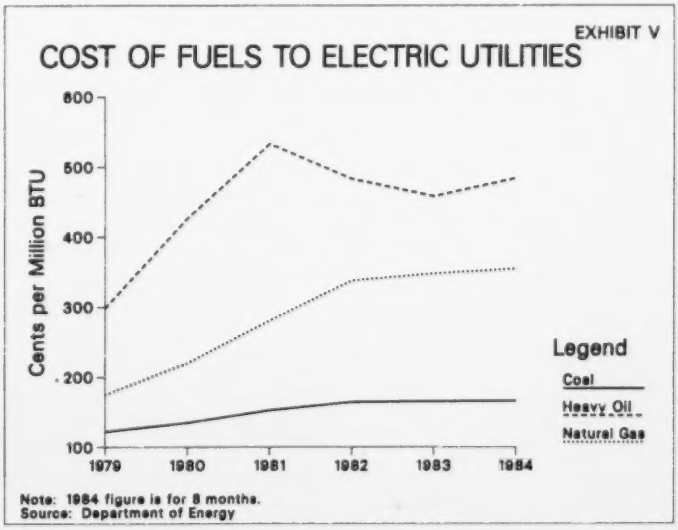
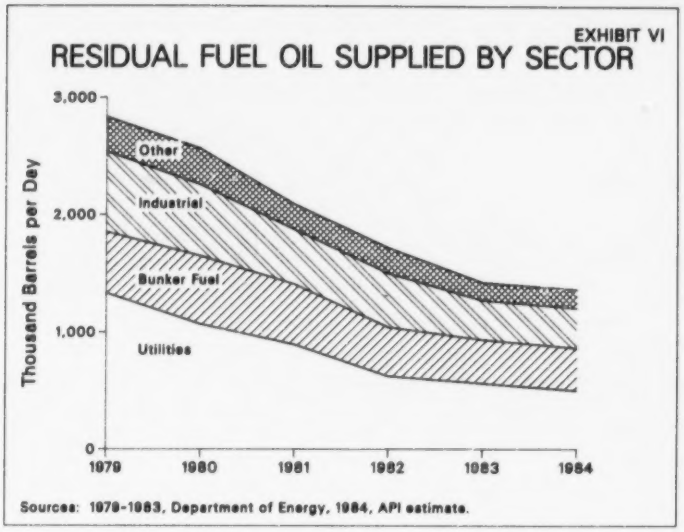


Exhibit VI depicts the sectorial shares of the residual fuel oil market over the past six years, reflecting both its overall volume loss and the changing shares of its sectors. The volume loss over the period, in the main, was the result of rising residual fuel oil prices and its eroding competitive position vis-à-vis alternate fuel sources. A slackening of the economy, only turned around since 1983, contributed to the decline in residual fuel oil use over the past several years. The experience is not unique to the U.S. Available data indicate that, while not quite as severe a decline as in the U.S., consumption fell by roughly one-third between 1979 and 1983 in Western Europe and Japan.

EXHIBIT VI




**Kerosine Jet Fuel**

**DELIVERIES ALMOST 14% AHEAD OF LAST YEAR.**

Kerosine jet fuel deliveries rose 7% in December but are up nearly 14% for the year as a whole. Reasons for the high percentage increase continue to be difficult to determine. While adjustments in inventories by operating companies, both in recent months and at the beginning of 1984, likely contributed to the increase, and some product early in the year may have been used to augment temporarily-tight distillate supplies, most of the increase is the result of higher airline traffic. The only offset is provided by continued efficiency improvements; however, it is doubtful that the substantial rates of operating savings achieved in the early eighties are being duplicated. It is, therefore, surprising that the advance in miles flown is reported to have averaged only about 10% (10 months data).

EXHIBIT VII

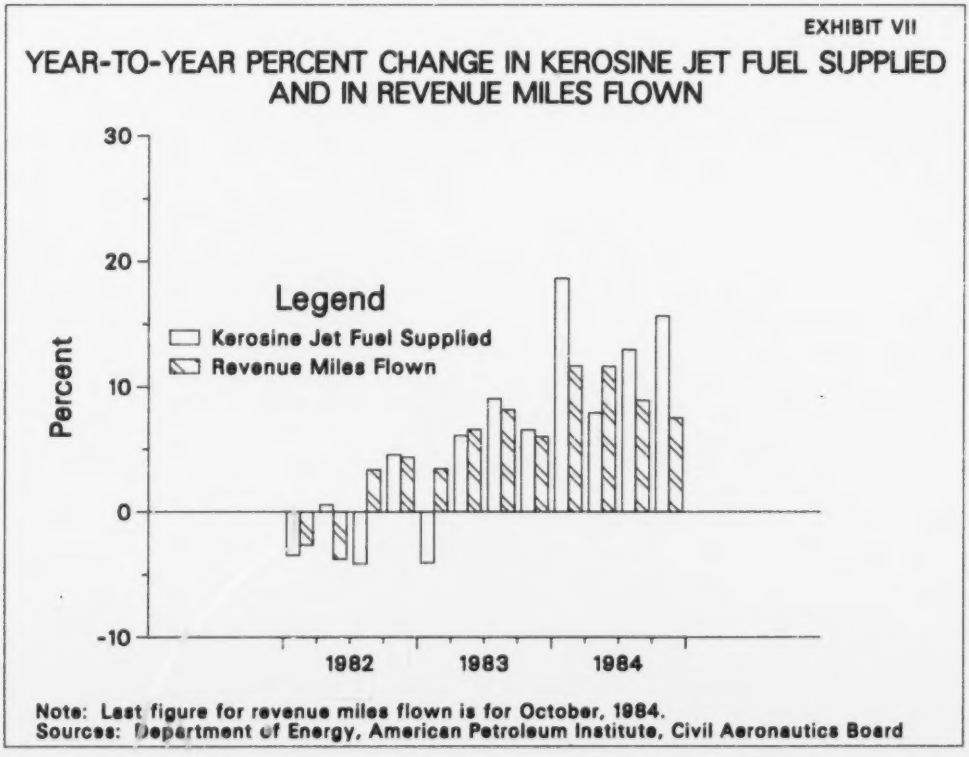



Exhibit VII shows year-to-year increases in miles flown and kerosine jet deliveries for 1982, 1983, and 1984 on a quarterly basis. It is evident that air traffic grew at an even faster pace in 1984 than in 1983, as the economic recovery gained momentum.

**Other Oils**

**UP 7% OVER 1983.** "Other oils" were supplied at an increased rate of 251 MBD (6.9%) in 1984 over the prior year's level. Exhibit VIII shows the sector breakdown of "other oils" since 1978. The 1983/1984 quarterly breakdown in table C below reveals that 1984's nearly 7% overall advance masks a change in the rate of year-to-year increases as the year progressed.

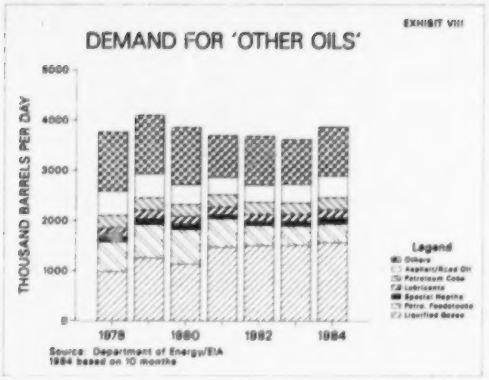



**Table C**
**Demand for "Other Oils"**
**(MBD)**

| | Liquified Petroleum Gases | Petro-Chemical Feedstocks | Special Naphtha | Lubricants | Petroleum Coke | Asphalt and Road Oil | Misc. Oils | Total |
|---|---|---|---|---|---|---|---|---|
| 1983 | | | | | | | | |
| Q I | 1675 | 394 | 74 | 133 | 189 | 753 | 904 | 3522 |
| II | 1255 | 401 | 83 | 150 | 203 | 413 | 824 | 3329 |
| III | 1590 | 386 | 86 | 155 | 273 | 408 | 1140 | 3838 |
| IV | 1716 | 374 | 81 | 148 | 248 | 315 | 944 | 3826 |
| 1984 | | | | | | | | |
| Q I | 1762 | 411 | 97 | 158 | 260 | 164 | 989 | 3841 |
| II | 1399 | 405 | 113 | 159 | 240 | 435 | 977 | 3728 |
| III | 1486 | 362 | 129 | 153 | 243 | 656 | 972 | 4001 |
| OCTOBER | 1648 | 294 | 108 | 162 | 286 | 540 | 933 | 3971(a) |

Source: Department of Energy. Note (a): 1984 DOE data not available beyond October.

The variance in part reflects the fairly substantial changes that occurred in chemical sales levels. While sales growth was in the area of 10% earlier this year, the pace has slackened considerably during the past several months as a result of a moderation of economic activity and continuing increased imports of major chemicals.

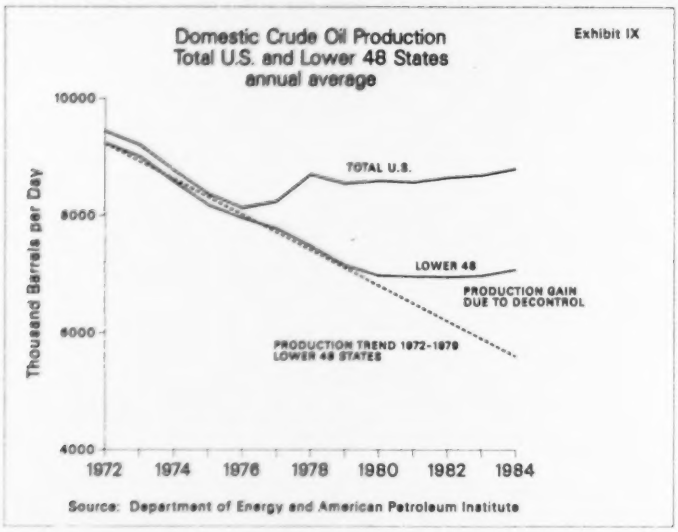
| (In millions of B/D) | DECEMBER ESTIMATES | | | YEAR-TO-DATE ESTIMATES | | |
|---|---|---|---|---|---|---|
| | 1984 | 1983 | % Change | 1984 | 1983 | % Change |
| —Total domestic products supplied | 16.1 | 16.7 | (4.0) | 15.8 | 15.2 | 3.5 |
| —Motor gasoline supplied | 6.8 | 6.8 | (0.9) | 6.7 | 6.6 | 1.2 |
| —Distillate fuel oil supplied | 3.1 | 3.4 | (9.1) | 2.9 | 2.7 | 6.8 |
| —Residual fuel oil supplied | 1.2 | 1.6 | (22.1) | 1.4 | 1.4 | (4.4) |

## PETROLEUM SUPPLY[1/]

Total supply was 804 MBD above 1983 levels; imports rose 369 MBD and total domestic supply increased 435 MBD. The latter increase is at least partly the result of rising levels of "unaccounted - for" crude oil, currently under scrutiny. There has also been a roughly 5½% increase in natural gas liquids production over 1983 levels as natural gas production increased.

**Production**

**UP 1.4% OVER LAST YEAR.** Crude oil production rose 123 MBD (1.4%) over last year, three times 1983's year-to- year advance. While total U.S. output has been rising since late 1981, it has only been since last spring that the contribution made by lower 48 output played a meaningful part in the overall increase. The sizable weather-related production decrease in December 1983—some 300-400 MBD—biases the comparison somewhat in favor of 1984 results.

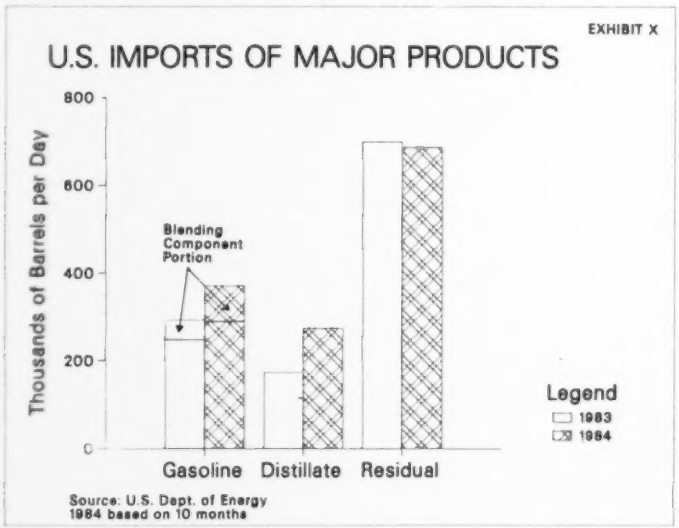



As Exhibit IX shows, lower forty-eight production began to rise slowly soon after oil prices were decontrolled. Current production is some 1.6 million barrels per day higher than likely would have been the case, had the steady year-to-year losses of the price-controlled seventies continued.

## Imports

**1984 IMPORTS ALMOST 8% HIGHER THAN LAST YEAR**

Total petroleum imports rose 369 MBD (7.7%) over year-earlier levels. The 1984 increase in product imports was over twice the size of the increase in crude oil imports. Exhibit X compares 1983 and 1984 imports for major product categories. With residual fuel oil imports down some 5% from 1983 levels, the largest portion of the product imports increase is the result of higher imports of distillates and gasoline (including gasoline components) which rose by about one-half and one-third, respectively, over year-earlier levels.




Though the increase in product imports was more marked in 1984, product imports have garnered an increasing share of individual products' total demand over the past few years. The change in the rate of increase in the import of gasoline components, even within 1984, was especially dramatic. While about 55% higher than 1983's in the first half, volume is estimated at more than twice 1983's level in the second half, in good part because increases in the fourth quarter are believed to have been at an even greater rate.

The growth of imports, related to rising demand and relatively stable inventories, and a fall-off of export levels, pushed up U.S. net dependency to almost 29%. It had declined from about 43% in 1979 to 27% in 1983. Exhibit XI traces net dependency levels graphically by major product for the past 6 years and quarterly levels of total net dependency are detailed in table D.

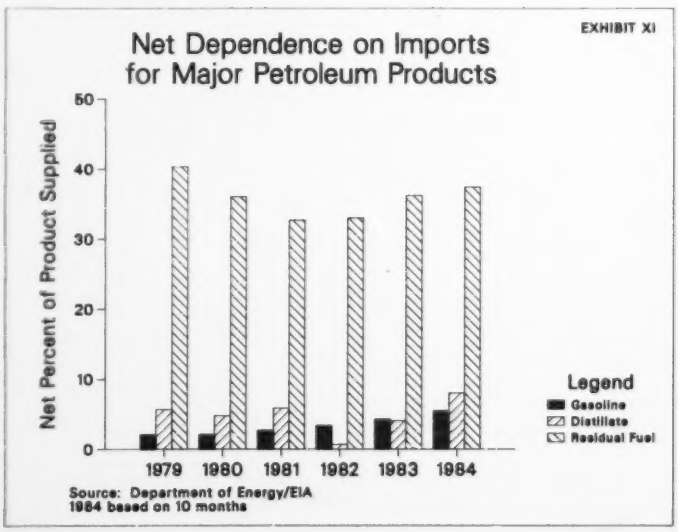


TABLE D

# TOTAL NET DEPENDENCE ON PETROLEUM IMPORTS

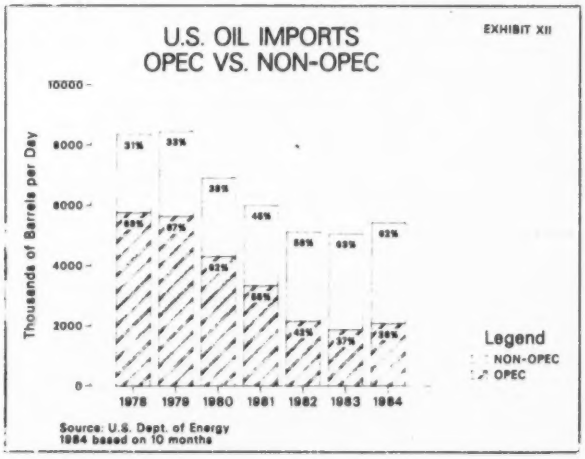
| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|---|
| Q1 | 40.1% | 40.6% | 34.2% | 24.3% | 19.1% | 28.6% |
| Q2 | 42.7 | 38.4 | 30.6 | 25.6 | 27.0 | 29.0 |
| Q3 | 45.0 | 35.6 | 32.9 | 30.7 | 33.0 | 27.9 |
| Q4 | 43.4 | 33.4 | 30.3 | 27.7 | 27.6 | 28.9 |

SOURCE: DEPT. OF ENERGY AND AMERICAN PETROLEUM INST.

Because of constantly-changing market conditions, year-to-year changes in import patterns have been erratic. The large increases that occurred in the first half of the year reflected unusually low levels in the early part of the corresponding 1983 period when purchasers held back commitments due to impending price decreases. Price uncertainties in the third quarter of 1984 reduced import levels. Fourth quarter levels, while ahead of last year despite December's roughly 200 MBD decrease, were below the average for the first nine months on a deseasonalized basis as demand faltered.

As Exhibit XII shows, sources of U.S. imports changed in favor of non-OPEC nations until 1983. As inventories stabilized and demand rose, there has been a slight shift towards OPEC producers, the marginal sources of supply.

Mexico continued to be the leading source of U.S. imports in 1984 (10 months data) followed by Canada, Venezuela, the United Kingdom, and Saudi Arabia. For the corresponding period in 1983, the order for the first four places was the same, but Indonesia had then occupied fifth place.




## Inventories

**UP SLIGHTLY OVER LAST DECEMBER.** Stock levels at the end of the year were slightly higher than at the end of 1983,mainly because of higher gasoline and distillate inventories.

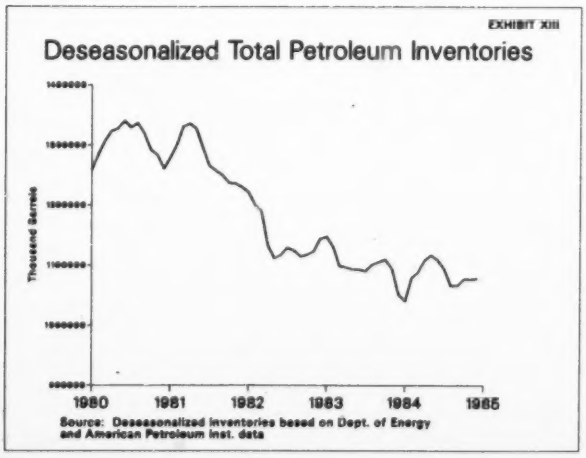



Exhibit XIII graphs deseasonalized inventory levels for the past four years, showing their relative stability since they were reduced in 1982 from the abnormal levels held following the supply disruption of late-1978/early 1979.

Gasoline inventories were above normal during the first half of 1984, in the main because of substantial levels of distillate production needed to satisfy demand and replenish inventories, but have been reduced in recent months. At year's end, gasoline inventories represented a relatively-normal 36 days of supply versus 32 days of supply last December.

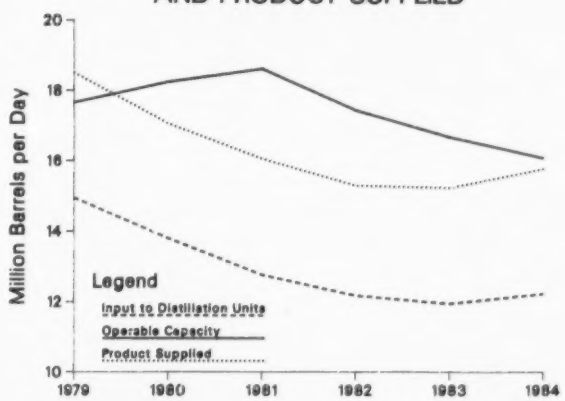
With fourth-quarter distillate production levels almost 150 MBD above 1983 levels for the corresponding period and distillate demand inhibited by warmer weather in recent weeks, distillate stocks reached a level some 18 million barrels above last year by the end of December.

## Operations

Exhibit XIV compares refinery input, operable capacity, and levels of product supplied. While average input to distillation units increased about 280 MBD (roughly 2.3%) in 1984 over 1983 levels, the domestic products supplied level rose about 540 MBD, or 3.5%, the difference accounted for largely by higher products imports. The higher input, combined with a 3.5% decrease in operable capacity, raised the average refinery utilization rate by more than 4 percentage points, to 76%, in 1984 over the prior year level. Despite the continued decline in operable capacity in 1984, however, utilization rates are still far below levels of the early seventies, when input to refineries was only slightly below 1984's but total operable refining capacity almost three million barrels below current levels.

EXHIBIT XIV

INPUT TO DISTILLATION UNITS, REFINERY CAPACITY, AND PRODUCT SUPPLIED




Sources: Department of Energy, American Petroleum Institute.

## Exploration

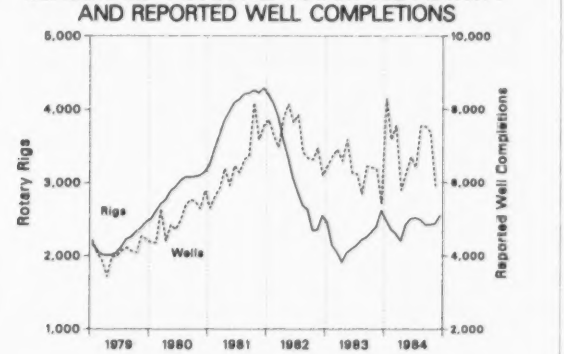
**RISING ACTIVITY LEVELS IN 1984.** Drilling activity picked up somewhat from 1983 levels. The number of active rigs rose 9% over year-ago levels. Year-to-year increases have been considerably lower in recent months, and, because of December's decrease, averaged only about 1% in the fourth quarter. Wells reported drilled averaged an almost 8% greater number than in 1983 (11 months data). The comparison is slightly distorted by an additional reporting week in January of 1984; this accounts for roughly 2 percentage points of the total increase. As mentioned in last month's Report, starting in 1985 the A.P.I. will switch to a new reporting system based on "month-of-completion" data.

Exhibit XV shows activity levels for active rigs and the number of wells reported drilled for the last six years.

Seismic crew levels, a longer range indicator, rose 4% in 1984 from prior-year levels.

EXHIBIT XV

SEASONALLY ADJUSTED ROTARY RIG ACTIVITY AND REPORTED WELL COMPLETIONS




Sources: Hughes Tool Company, American Petroleum Institute

| (In millions of B/D) | DECEMBER ESTIMATES | | | YEAR-TO-DATE ESTIMATES | | |
|---|---|---|---|---|---|---|
| | 1984 | 1983 | % Change | 1984 | 1983 | % Change |
| —Total supply | 16.1 | 15.3 | 5.3 | 16.5 | 15.7 | 5.1 |
| —Crude production[2/] | 8.8 | 8.4 | 4.8 | 8.8 | 8.7 | 1.4 |
| —Crude oil imports[3/4/] | 2.7 | 3.0 | (9.5) | 3.2 | 3.1 | 3.6 |
| —Product imports | 1.9 | 1.8 | 4.6 | 2.0 | 1.7 | 14.9 |

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 451 million barrels as of December 31, 1984).

## ESTIMATED UNITED STATES PETROLEUM BALANCE

**(Daily Average in Thousands of 42 Gallon Barrels)**

| Products Supplied/Supply From Primary Storage | DECEMBER | | | YEAR-TO-DATE | | |
|---|---|---|---|---|---|---|
| | 1984[1] | 1983[2] | % Change | 1984[3R] | 1983[2] | % Change |
| Products Supplied: | | | | | | |
| Total motor gasoline | 6,781 | 6,846 | (0.9) | 6,702 | 6,622 | 1.2 |
| Finished leaded motor gasoline* | 2,520 | 2,880 | (12.5) | 2,715 | 2,975 | (8.7) |
| Finished unleaded motor gasoline* | 4,261 | 3,966 | 7.4 | 3,987 | 3,647 | 9.3 |
| Naphtha-jet | 250 | 206 | 21.4 | 225 | 207 | 8.7 |
| Kerosine-jet | 1,040 | 975 | 6.7 | 954 | 839 | 13.7 |
| Distillate fuel oil | 3,060 | 3,365 | (9.1) | 2,874 | 2,690 | 6.8 |
| Residual fuel oil | 1,236 | 1,587 | (22.1) | 1,358 | 1,421 | (4.4) |
| All other oils[4] | 3,879 | 3,921 | (1.1) | 3,870 | 3,619 | 6.9 |
| Reclassified[5] | - 184 | - 173 | 6.4 | - 211 | - 166 | 27.1 |
| Total domestic products supplied | 16,062 | 16,727 | (4.0) | 15,772 | 15,232 | 3.5 |
| Exports | 665 | 639 | 4.1 | 677 | 739 | (8.4) |
| Total products supplied | 16,727 | 17,366 | (3.7) | 16,449 | 15,971 | 3.0 |
| Supply: | | | | | | |
| Domestic production: | | | | | | |
| Crude oil[6] | 8,796 | 8,397 | 4.8 | 8,811 | 8,688 | 1.4 |
| Natural gas liquids | 1,718 | 1,544 | 11.3 | 1,644 | 1,559 | 5.5 |
| Other supply[7] | 980 | 530 | 84.9 | 881 | 654 | 34.7 |
| Total domestic supply | 11,494 | 10,471 | 9.8 | 11,336 | 10,901 | 4.0 |
| Imports: | | | | | | |
| Crude oil, total | 2,732[10/] | 3,020[10/] | (9.5) | 3,209[10/] | 3,096[10/] | 3.6 |
| Canadian | 284 | 299 | (5.0) | 328 | 274 | 19.7 |
| Other | 2,448 | 2,721 | (10.0) | 2,881 | 2,822 | 2.1 |
| Products, total | 1,904 | 1,820 | 4.6 | 1,978 | 1,722 | 14.9 |
| Residual fuel oil | 581 | 649 | (10.5) | 663 | 699 | (5.2) |
| Other | 1,323 | 1,171 | 13.0 | 1,315 | 1,023 | 28.5 |
| Total imports | 4,636 | 4,840 | (4.2) | 5,187 | 4,818 | 7.7 |
| Total supply | 16,130 | 15,311 | 5.3 | 16,523 | 15,719 | 5.1 |
| Stock change, all oils | - 597 | -2,055 | XXXX | + 74 | - 252 | XXXX |
| **Refinery Operations** | | | | | | |
| Input to crude oil distillation units | 11,984 | 11,424 | 4.9 | 12,225 | 11,947 | 2.3 |
| Operable capacity | 16,074 | 16,342 | (1.6) | 16,081 | 16,668 | (3.5) |
| Refinery utilization (%)[8] | 74.6% | 69.9% | 6.7 | 76.0% | 71.7% | 6.0 |
| Crude oil runs | 11,824 | 11,234 | 5.3 | 12,057 | 11,685 | 3.2 |

| Stocks (millions bbls.) | 1984 | | 1983[2] | % Change from ... | |
|---|---|---|---|---|---|
| | Dec. 31[9] | Nov. 30[9] | Dec. 31 | Previous Month | Year Ago |
| Crude oil [10/] | 337.0 | 341.4r/ | 343.9 | (1.3) | (2.0) |
| Unfinished oils | 96.7 | 106.9 | 108.0 | (9.5) | (10.5) |
| Total motor gasoline** | 241.0 | 242.7 | 222.4 | (0.7) | 8.4 |
| Finished leaded motor gasoline* | 91.5 | 89.2 | 94.1 | 2.6 | (2.8) |
| Finished unleaded motor gasoline* | 110.4 | 111.2 | 91.4 | (0.7) | 20.8 |
| Naphtha-jet | 7.1 | 6.7r/ | 6.3 | 6.0 | 12.7 |
| Kerosine-jet | 37.2 | 39.4 | 32.3 | (5.6) | 15.2 |
| Distillate fuel oil | 158.4 | 160.4r/ | 140.3 | (1.2) | 12.9 |
| Residual fuel oil | 54.2 | 50.2 | 48.5 | 8.0 | 11.8 |
| All other oils | 170.1 | 172.5r/ | 172.8 | (1.4) | (1.6) |
| Total all oils | 1,101.7 | 1,120.2r/ | 1,074.5 | (1.7) | 2.5 |

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-October, U.S. Department of Energy, November-December, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

## ESTIMATED UNITED STATES PETROLEUM BALANCE

**(Daily Average in Thousands of 42 Gallon Barrels)**

| Products Supplied/Supply From Primary Storage | 4th QUARTER | | |
|---|---|---|---|
| | 1984[1] | 1983[2] | % Change |
| Products Supplied: | | | |
| Total motor gasoline | 6,720 | 6,680 | 0.6 |
| Finished leaded motor gasoline* | 2,555 | 2,889 | (11.6) |
| Finished unleaded motor gasoline* | 4,165 | 3,791 | 9.9 |
| Naphtha-jet | 231 | 192 | 20.3 |
| Kerosine-jet | 1,008 | 872 | 15.6 |
| Distillate fuel oil | 2,924 | 2,950 | (0.9) |
| Residual fuel oil | 1,179 | 1,397 | (15.6) |
| All other oils[3] | 3,900 | 3,826 | 1.9 |
| Reclassified[4] | - 184 | - 184 | - |
| Total domestic products supplied | 15,778 | 15,733 | 0.3 |
| Exports | 636 | 631 | 0.8 |
| Total products supplied | 16,414 | 16,364 | 0.3 |
| Supply: | | | |
| Domestic production: | | | |
| Crude oil[5] | 8,831 | 8,644 | 2.2 |
| Natural gas liquids | 1,701 | 1,596 | 6.6 |
| Other supply[6] | 885 | 605 | 46.3 |
| Total domestic supply | 11,417 | 10,845 | 5.3 |
| Imports: | | | |
| Crude oil, total | 3,280 9/ | 3,143 9/ | 4.4 |
| Canadian | 323 | 294 | 9.9 |
| Other | 2,957 | 2,849 | 3.8 |
| Products, total | 1,921 | 1,835 | 4.7 |
| Residual fuel oil | 514 | 688 | (25.3) |
| Other | 1,407 | 1,147 | 22.7 |
| Total imports | 5,201 | 4,978 | 4.5 |
| Total supply | 16,618 | 15,823 | 5.0 |
| Stock change, all oils | + 204 | - 541 | XXXX |
| **Refinery Operations** | | | |
| Input to crude oil distillation units | 12,115 | 11,869 | 2.1 |
| Operable capacity | 16,047 | 16,337 | (1.8) |
| Refinery utilization (%)[7] | 75.5% | 72.7% | 3.9 |
| Crude oil runs | 11,953 | 11,670 | 2.4 |

| Stocks (millions bbls.) | 4th QUARTER | | |
|---|---|---|---|
| | 1984[8] | 1983[2] | % Change |
| Crude oil | 337.0 9/ | 343.9 9/ | (2.0) |
| Unfinished oils | 96.7 | 108.0 | (10.5) |
| Total motor gasoline** | 241.0 | 222.4 | 8.4 |
| Finished leaded motor gasoline* | 91.5 | 94.1 | (2.8) |
| Finished unleaded motor gasoline* | 110.4 | 91.4 | 20.8 |
| Naphtha-jet | 7.1 | 6.3 | 12.7 |
| Kerosine-jet | 37.2 | 32.3 | 15.2 |
| Distillate fuel oil | 158.4 | 140.3 | 12.9 |
| Residual fuel oil | 54.2 | 48.5 | 11.8 |
| All other oils | 170.1 | 172.8 | (1.6) |
| Total all oils | 1,101.7 | 1,074.5 | 2.5 |

1/ Source: U.S. Department of Energy, October; November-December, API.
2/ Source: U.S. Department of Energy.
3/ Includes crude losses.
4/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
5/ Includes lease condensate.
6/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
7/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
8/ Derived by interpolating API weekly stocks data.
9/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.